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| APPLICATION NO. | FIL | JING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------|------------|----------------------|--------------------------|------------------|
| 10/516,375 | 10/516,375 07/11/2005 | | Daniel Jacquinot | 1429-148 | 1395 |
| 24106 | 7590 | 03/23/2006 | | EXAM | INER |
| EGBERT LA | | | WIMER, MICHAEL C | | |
| 412 MAIN STREET, 7TH FLOOR HOUSTON, TX 77002 | | | | ART UNIT | PAPER NUMBER |
| 110001011, | 171 77002 | , | | 2828 | |
| | | | | DATE MAIL ED: 03/23/2006 | 4 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | ¥. | | | | | |
|--|---|---|--|--|--|--|--|
| | Application No. | Applicant(s) | | | | | |
| | 10/516,375 | JACQUINOT, DANIEL | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Michael C. Wimer | 2828 | | | | | |
| The MAILING DATE of this communication | appears on the cover sheet v | vith the correspondence address | | | | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFI after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the m earned patent term adjustment. See 37 CFR 1.704(b). | G DATE OF THIS COMMUN R 1.136(a). In no event, however, may a riod will apply and will expire SIX (6) MO atute, cause the application to become A | ICATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on _ | | | | | | | |
| 2a) This action is FINAL . 2b) ⊠ 1 | This action is non-final. | | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | | |
| 4) Claim(s) 1-7 is/are pending in the application 4a) Of the above claim(s) is/are without 5) Claim(s) is/are allowed. 6) Claim(s) 1-7 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and | drawn from consideration. | | | | | | |
| Application Papers | | | | | | | |
| 9)☐ The specification is objected to by the Exam | niner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>11 July 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the cor 11) The oath or declaration is objected to by the | • | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a | nents have been received. Itents have been received in a Depriority documents have been Treau (PCT Rule 17.2(a)). | Application No n received in this National Stage | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) | | Summary (PTO-413) | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date | | (s)/Mail Date Informal Patent Application (PTO-152) | | | | | |

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DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1, line 4, it is unclear what is meant by "a bandwidth low frequency tuned reflector". How does a reflector have such a characteristic? Is it resonant? Does this terminology imply that the reflector has "low bandwidth"? What is "low" bandwidth as opposed to "high" bandwidth?

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gegan (4692769).

Regarding Claims 1-3, Gegan shows in Fig. 1, a planar broadband patch antenna comprising a ground plane (unnumbered in Fig. 2) and patch radiator 10 for radiating in a first frequency A and a radiating slot 24 that creates an additional resonant frequency B. Slots 26 and 28 are also shown within the patch for tuning the input impedance of the antenna. It would have been clear to

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a skilled artisan that the slots 26 and 28 have resonant frequencies as all slots having a dimension within a patch exhibit. Thus, a skilled artisan would have found it obvious that the slots 26 and 28 provide additional frequencies. The feeder 16 (and 32 in Fig. 3) is a strip line coupling as claimed.

Allowable Subject Matter

- 5. Claims 4-7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (571) 272-1833. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun O. Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Wimer Primary Examiner Art Unit 2828

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